SECTION 02270

SLOPE PROTECTION AND EROSION CONTROL

PART 1 GENERAL

1.1 SECTION INCLUDE

A. Straw Bales

B. Silt fence

C. Riprap

D. Geocell grid

PART 2 PRODUCTS

2.1 MATERIALS

A. Straw Bales

1. Provide hay or straw bales free of noxious seeds, weeds, mold and rot.

2. Provide nominal 18 inch by 18 inch by 36 inch long bales weighing between 65 and 80 pounds.

B. Silt Fence

1. Filter Fabric

Conform to the following:

Fabric Properties	Test Method	Minimum Value
Grab Tensile, Warp/Fill	ASTM D-4632	120/100 lbs.
Grab Elongation	ASTM D-4632	15%
Trapezoid Tear	ASTM D-4633	50 lbs.
Mullen Burst	ASTM D-3786	280 psi
Puncture Strength	ASTM D-4833	60 lbs.
Permitivity	ASTM D-4491	0.27 sec^{-1}
AOS (sieve size)	ASTM D-4751	20
UV Stability (500 hrs., xenon arc)	ASTM D-4355	90% Strength Retained
Vertical Water Flow Rate	ASTM D-4491	18.5 gpm/sf

American Excelsior GTF 180 or approved equal.

2. Post

Provide lumber conforming to PS 20, graded in accordance with established grading rules of the National Forest Products Association, with a maximum moisture content of 19 percent, No.2 grade.

Provide steel posts of standard T or U sections weighing not less than 1.0 pound per linear foot.

3. Fencing

Provide fence fabric of chain link steel in 6 inch or smaller mesh and of 14 gauge minimum thickness.

C. Riprap

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Specify specific type of riprap in accordance with New Mexico State Highway Department, Standard Specifications for Road and Bridge Construction

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1. Provide riprap conforming to the requirements of New Mexico State Highway Department, Standard Specifications for Road and Bridge Construction, 1984 Edition, Section 603-RIPRAP

D. Geocell Grid

1. Provide a three dimensional, semi-rigid geomatrix structure of honeycomb design suitable for earth stabilization, geocell grid system with a nominal cell area of 220 square inches and a cell height of 4 inches.

Akzo Industrial Systems Company's, Armater or approved equal.

PART 3 EXECUTION

3.1 PREPARATION

A. Identify required contours and datum locations.

B. Notify LANL 10 days prior to start of construction to identify known underground utilities and stake and flag locations.

C. Maintain and protect existing utilities in work area.

3.2 PLACEMENT

A. Construct slope protection and erosion control measures in accordance the details shown on the Drawings.

B. After slope protection and erosion control measures are in place, grade surrounding area and blend into adjacent work.

END OF SECTION